

CLAIM AMENDMENTS

IN THE CLAIMS

This listing of the claims will replace all prior versions, and listing, of claims in the application or previous response to office action:

1. **(Currently Amended)** A method for assigning an internal port address to uniquely identify a port associated with a routing processor of a network device associated with, and having a location within, a system, comprising:

allocating a location section of the internal port address corresponding to the location of the network device within the system;

allocating a routing processor section of the internal port address corresponding to a ~~routing processor associated with~~ the routing processor; [[and]]

allocating a port section of the internal port address corresponding to the port; and
encapsulating a data frame transmitted through the port with the internal port address.

2. (Original) The method of claim 1, wherein allocating a location section further comprises allocating a shelf section of the internal port address corresponding to the location of the network device within a shelf.

3. (Original) The method of claim 2, wherein the network device is associated with at least one geographical locator indicator; and the shelf section is derived from the geographical locator indicator.

4. (Original) The method of claim 1, wherein allocating a location section further comprises allocating a slot section of the internal port address corresponding to the location of the network device within a slot.

5. (Original) The method of claim 4, wherein the slot is located within a shelf.

6. (Original) The method of claim 4, wherein

the network device is associated with at least one geographical locator indicator; and
the shelf section is derived from the geographical locator indicator.

7. (Original) The method of claim 1, wherein
the routing processor is associated with a PCI slot ID; and
the routing processor section is derived from the PCI slot ID.

8. (Original) The method of claim 1, wherein the network device is a line card.

9-20. (Cancelled)

21. (Currently Amended) A method for assigning an internal port address to uniquely identify a port associated with a routing processor of a network device associated with, and having a location within, a system, comprising:

allocating a location section of the internal port address corresponding to the location of the network device within the system;

allocating a shelf section of the location section of the internal port address, the shelf section corresponding to the location of the network device within a shelf;

allocating a routing processor section of the internal port address corresponding to a ~~routing processor associated with~~ the routing processor; [[and]]

allocating a port section of the internal port address corresponding to the port; and
encapsulating a data frame transmitted through the port with the internal port address.

22. (Previously Presented) The method of claim 21, wherein the network device is associated with at least one geographical locator indicator; and the shelf section is derived from the geographical locator indicator.

23. (Previously Presented) The method of claim 21, further comprising allocating a slot selection of the location of the internal port address, the slot selection corresponding to the location of the network device within a slot.

24. (Previously Presented) The method of claim 23, wherein the slot is located within a shelf.

25. (Previously Presented) The method of claim 23, wherein the network device is associated with at least one geographical locator indicator; and the shelf section is derived from the geographical locator indicator.

26. (Previously Presented) The method of claim 21, wherein the routing processor is associated with a PCI slot ID; and the routing processor section is derived from the PCI slot ID.

27. (Previously Presented) The method of claim 21, wherein the network device is a line card.

28. (Currently Amended) A method for assigning an internal port address to uniquely identify a port associated with a routing processor of a network device associated with, and having a location within, a system, comprising:

allocating a location section of the internal port address corresponding to the location of the network device within the system, the network device associated with at least one geographical locator indicator such that the location section is derived from the geographical locator indicator;

allocating a routing processor section of the internal port address corresponding to a ~~routing processor associated with~~ the routing processor; [[and]]

allocating a port section of the internal port address corresponding to the port; and
encapsulating a data frame transmitted through the port with the internal port
address.

29. (Previously Presented) The method of claim 28, wherein allocating a location section further comprises allocating a shelf section of the internal port address corresponding to the location of the network device within a shelf.

30. (Previously Presented) The method of claim 28, wherein allocating a location section further comprises allocating a slot section of the internal port address corresponding to the location of the network device within a slot, the slot selection located within a shelf.

31. (Previously Presented) The method of claim 28, wherein the routing processor is associated with a PCI slot ID; and the routing processor section is derived from the PCI slot ID.

32. (Previously Presented) The method of claim 28, wherein the network device is a line card.